# GEORGIAN MEDICAL MEWS

ISSN 1512-0112

NO 11 (332) ноябрь 2022

# ТБИЛИСИ - NEW YORK



# ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии საქართველოს სამედიცინო სიახლენი

# **GEORGIAN MEDICAL NEWS**

Monthly Georgia-US joint scientific journal published both in electronic and paper formats of the Agency of Medical Information of the Georgian Association of Business Press. Published since 1994. Distributed in NIS, EU and USA.

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

# К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

- 1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра. Используемый компьютерный шрифт для текста на русском и английском языках Times New Roman (Кириллица), для текста на грузинском языке следует использовать AcadNusx. Размер шрифта 12. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.
- 2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.
- 3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

- 4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).
- 5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи. Таблицы и графики должны быть озаглавлены.
- 6. Фотографии должны быть контрастными, фотокопии с рентгенограмм в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста в tiff формате.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

- 7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.
- 8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform\_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.
- 9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.
- 10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.
- 11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.
- 12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

# REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

- 1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface Times New Roman (Cyrillic), print size 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.
- 2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.
- 3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

- 4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.
- 5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles. Tables and graphs must be headed.
- 6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

- 7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.
- 8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform\_requirements.html http://www.icmje.org/urm\_full.pdf
- In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).
- 9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.
- 10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.
- 11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.
- 12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

### ᲐᲕᲢᲝᲠᲗᲐ ᲡᲐᲧᲣᲠᲐᲓᲦᲔᲑᲝᲓ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

- 1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში Times New Roman (Кириллица), ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ AcadNusx. შრიფტის ზომა 12. სტატიას თან უნდა ახლდეს CD სტატიით.
- 2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ,რუსულ და ქართულ ენებზე) ჩათვლით.
- 3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).
- 4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).
- 5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.
- 6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით tiff ფორმატში. მიკროფოტო-სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ-რათის ზედა და ქვედა ნაწილები.
- 7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა უცხოური ტრანსკრიპციით.
- 8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.
- 9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.
- 10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.
- 11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.
- 12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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### ANTI HOMOTOXIC DRUGS USING IN DENTAL PRACTICE

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### Abstract.

In modern conditions, against the background of increasing numbers of complications when using potent chemicals, it became necessary to looking for alternative medicines, such as homeopathic medicines.

**Aim:** The aim of this review article is to prove the importance of further research of the antihomotoxic drugs (AHTD) using, which are an integral part of homeopathic therapy, for the complex treatment of diseases of the maxillofacial region of various genesis, taking into account the mechanism of action of this group of homeopathic medicines.

Materials and methods: More than 30 scientific sources of the antihomotoxic drug "TRAUMEEL\*S" using in treatment of inflammatory diseases of the maxillofacial region, as well as the use of homeopathic medicines to prevent the development of necrotic phenomena in the pulp of tooth have been processed.

**Results:** The importance of further studies on the use of antihomotoxic drugs, which are an integral part of homeopathic therapy, for the complex treatment of diseases of the maxillofacial region of various origin, taking into account the mechanism of action of this group of homeopathic drugs have been substantiated.

Conclusions: The therapy with antihomotoxic drugs, namely, "TRAUMEEL\*S", produces positive results in treatment of various inflammatory processes of the maxillofacial area in various dental diseases.

**Key words.** "TRAUMEEL®S", homeopathic therapy, maxillofacial region.

### Introduction.

Currently, widespread use in all fields of medicine, as well as in dentistry, are receiving treatments using homeopathic remedies. From the whole spectrum of these drugs, the most effective ones have proven themselves to be antihomotoxic drugs and, above all, the complex specialized restorative AHTD - "TRAUMEEL\*S". Antihomotoxic therapy is a type of stimulating therapy based on a slight arousal of the body's defense systems. During such treatment, homotoxins similar to those due to which the disease arose are introduced into the body [1,2].

Antihomotoxic drugs are composed of various active components of plant, mineral and animal origin, which is a composition that meets all the needs of effective and safe therapy. The effect of complex antihomotoxic drugs is spread at all levels and in all directions. The different level of action of drugs is fundamentally important in the treatment of diseases that are accompanied by inflammatory and traumatic symptoms.

### The aim.

The aim of this review article is to draw more active attention to the use of antihomotoxic drugs, and in particular,

"TRAUMEEL®S" for the treatment and prevention of inflammatory diseases of the maxillofacial region in combination with modern chemical preparations, and in some clinical cases completely replace this group of drugs agent for antihomotoxic therapy.

### Materials and methods.

More than 30 sources, reflecting both the composition and mechanism of the action of antihomotoxic drugs, and treatment methods using this group of drugs for inflammatory diseases of the maxillofacial region in writing this review article have been processed.

### Review and Discussion.

The mechanisms of action of antihomotoxic drugs are due to the action of the full spectrum of the potentials of the components that are included in their compositions. Antihomotoxic effect is obtained due to the formation of a hypomolecular (low molecular weight), homeopathic effect. The hypomolecular effect, in turn, consists of ligand-receptor binding; low dose homotoxic effect - regulatory action and ancillary immunological response. Homeopathic effect is based on the principle of "like treated like" - antitoxic effect.

AHTD action in terms of the pharmacological principle of the Arndt-Schulz law (1855): weak stimuli stimulate; medium - support; strong - inhibit; very strong - destroying life. Principles of action of antihomotoxic drugs: first, the regulatory impact is the maximum possible normalization of the processes of mesenchymal drainage, secondly, the regulation of the basic metabolism and immunity and, third, the restoration of the functionality of tissues, organs, and systems. With all the benefits of drugs, they have a high safety and almost complete absence of undesirable effects, the absence of age restrictions [3].

The widespread use of "TRAUMEEL®S" in dentistry is associated with its unique composition and, depending on it, the wide range of action of the drug. "TRAUMEEL®S" consists of 12 components of plant origin and 2 mineral components in homeopathic form. The mechanism of action of this drug on the body is associated with the presence in its composition of flavonoids, which can inhibit the output of inflammatory mediators from stimulated tassel cells, which have an inhibitory effect on phospholipids due to the antagonism of entry of Ca²+ ions (chelate, blockade Ca²+ channels Ca²+ - aphthase activity or increased intracellular Ca²+ mobilization). Due to flavonoids also occurs hepatoprotective effect, which is manifested in the detoxification function of the liver, drainage activity of tissues, reducing the risk of complications of local and general [4,5].

Ascorbic acid, which is also part of "TRAUMEEL\*S", is a non - enzymatic antioxidant that converts oxides into less active products. It is a synergist of natural antioxidants and can restore the ionic forms of natural antioxidants, which increases the

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overall antioxidant activity of lipids, since ascorbic acid has a low redox potential and easily changes from one form to another. Activation of the processes in the inflammation site leads to the extracellular ascorbic acid oxidation and the occurrence of vitamin C deficiency in the pathological focus. Thus, ascorbic acid, which is an oxide, is itself oxidized by the action of oxygen and its deformation further exacerbates the imbalance of the proand antioxidant systems. This is confirmed by the fact that the local use of ascorbic acid, there is an improvement in the course of the inflammatory process. The interaction of flavonoids and vitamin C realizes the antioxidant effect of "TRAUMEEL®S", which leads to the restoration of microcirculation, the delivery of oxygen to the tissues, as well as its need in the process of energy metabolism. The antioxidant effect of flavonoids is also associated with the presence of a double bond in the carbonyl group in the heterocyclic moiety, the state and number of hydroxy groups in ring "B" as a trap of free oxygen radicals. The antioxidant effect of sulfur in its composition is realized by the formation of double bonds and increase the density of the packing of phospholipids of membranes, which prevents the penetration of reactive oxygen species and the formation of lipids of peroxide radicals, leads to the disappearance of the overall rate of oxidation and stabilization of the membranes. Due to this action, the removal of pus, wound healing, increase the immunological activity of the body [6-8].

In addition to its antioxidant, hepatoprotective action, "TRAUMEEL®S" also has the following properties: antiinflammatory, antiviral, analgesic and hemostatic. The abovementioned actions of "TRAUMEEL®S" are carried out at the expense of the following components: increase of a tone of vessels - Aconitum, Arnica; sealing of vessels - calcium; avoidance of venous stagnation and resistance to the formation of blood clots - Hemamelis; hemostatic effect - Millefolium. Containing and improving cellular respiration - sulfide and calcium polysulfide; the formation of "good" and complete manure - Hepar sulfuris. Stimulation of the large protective system - all components in the complex; activation of wound healing, overcoming shock - Arnica, Calendula, Echinacea Symphytum; anti-inflammatory effect - Belladonna, Acconitum, Mercurius, Hepar, Chamomilla; Arnica, Calendula, Hamamelis, Melifolium - antihemorrhagic properties, immunostimulating effect - Echinacea angustifolia I Echinacea purpurea.

Given the composition of "TRAUMEEL\*S" and its properties and actions, it is widely used in dental practice in the treatment of purulent-inflammatory processes in the maxillofacial area (phlegmon, abscesses), diseases of the oral mucosa (periodontitis, gingivitis stomatitis, aphthous stomatitis, herpes labialis, lip cracks), as well as complications of the carious process, namely - periodontitis. Separate authors have developed a method of using plasmolifting and the drug "TRAUMEEL\*S" in the complex treatment of periodontal diseases, which allowed to stop inflammation at an earlier date than when using the conventional method of treatment [9-16].

In the treatment of the root canal, the treatment is performed prior to filling with the "TRAUMEEL®S" injection solution in an isotonic solution. "TRAUMEEL®S" also treats stomatitis in children who have undergone chemotherapy. The drug

significantly reduces the severity and shortens the treatment of stomatitis. In the treatment of purulent-inflammatory processes in the maxillofacial area, the process of wound healing is faster, due to the restoration of microcirculation and normalization of redox processes in damaged tissues. In the treatment of purulentinflammatory processes of the face and neck with the use of "TRAUMEEL®S" symptoms of endogenous intoxication are more likely to disappear; Soft tissue edema and skin hyperemia in the area of inflammation are reduced more effectively, intensive healing of wounds. In the treatment of gingivitis and periodontitis is determined by the disappearance of the treatment of bad breath, the restoration of taste sensitivity, reduction of pain, reduction of bleeding gums and inflammation in general, the acceleration of processes of epithelialization of tissues, the reduction of depth of periodontal pockets, stabilization of the edge of the teeth, acceleration of edging and solid plaque, these phenomena, are also a consequence of the improvement due to the action of "TRAUMEEL®S", microcirculation and cellular respiration in tissues ah, increase the immunological reactivity of the body. In the treatment of odontogenic osteomyelitis, there was a decrease in ESR, a decrease in leukocytosis, an increase in the number of lymphocytes, which allows to reduce the number of exacerbations of the process and improve the quality of life of patients. In addition, it is used in complex therapy in the treatment of radiation-induced oral mucositis, which is the result of radiation therapy in patients with tumors of the head and neck [17-28].

We have proposed the use of the anti - homotoxic drug "TRAUMEEL®S" for the restoration of the receptor of the pulp of the teeth at the stages of treatment with fixed structures of prostheses in conjunction with the domestic light - curable adhesive. The effect of this drug has been proven by laboratory studies in rats and showed that the use of teeth after preparation of this complex reduces the manifestation of the inflammatory process in the pulp at the cellular level, changes in the layer of odontoblasts have adaptation-compensatory character and in dentine complete regeneration of shoots even processes branching. In clinical studies, it was found that the use of this compound after the operation of preparation of hard tissues under the construction of fixed dentures in the future virtually no complications in comparison with patients to whom this combination was not used [29-36].

# Conclusions.

The importance of further studies on the use of antihomotoxic drugs, which are an integral part of homeopathic therapy, for the complex treatment of diseases of the maxillofacial region of various origin, taking into account the mechanism of action of this group of homeopathic drugs, is substantiated. The results of numerous studies show a positive result of the influence of antihomotoxic drugs and, in particular, "TRAUMEEL\*S" in the treatment of diseases of the oral mucosa, periodontal tissue diseases, inflammatory diseases of the head and neck, odontogenic osteomyelitis, and also reflects the important role of this group of drugs in the treatment of diseases of the mucous membrane in the treatment of patients after radiation therapy, the use of "TRAUMEEL\*S" in the treatment of root canals and a new way of using the above eparata to prevent

possible complications of surgery preparation of dental hard tissues during the treatment by fixed prostheses constructions confirmed by experimental and clinical studies.

From all of the above it can be concluded that therapy with antihomotoxic drugs, namely, "TRAUMEEL®S", produces positive results in treatment of various inflammatory processes of the maxillofacial area and oral cavity, so you can continue to use the drug more widely various dental diseases.

### Conflict of interest statement.

The author declares no conflict of interest.

The work was performed on the basis of Kharkiv National Medical University under the guidance of the rector of the university, M.D., Ph.D., D.D.S., Professor, Honored Worker of Education of Ukraine - Valery Andreevich Kapustnyk.

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